FACT SHEET

Module 5 Vision for Driving

INFORMATION GAINED FROM THE THREE VISUAL AREAS

A driver gains information through the eyes through three vision fields:

1. Central vision is used to read and identify distinct objects. It is often measured by determining visual acuity through an eye chart. It is the basis for the visual lead, targeting and searching tasks in driving. Central vision is a narrow 5 degree cone of clear, focused visibility.

2. Fringe vision is the area around the central vision area that is used to judge depth and position. It is measured in testing through object identification and depth perception fields. It also gives support information to the central vision and is used for determining standard visual references in driving, relative position in space, time and movement into space/time. Fringe vision provides 30 to 36 degrees of useful information.
3. Peripheral vision is conical in shape, 175 to 185 degrees around the other vision fields. It functions to notice changes in color and object movement. Peripheral vision is strongly affected by fatigue, drugs and speed. It often gives the driver an initial warning of a changing or closed space area.

The three vision fields can be demonstrated by using two flashlights and showing them on a screen or blackboard. If they are focused together, obvious rings will appear demonstrating the three visual field concepts. An example of the three visual information fields can be given by identifying a problem coming toward a vehicle from the side. A driver will first recognize that something is moving toward the vehicle and then possibly see the type of vehicle (large/small truck or large/small car). The driver will then focus toward the vehicle to identify color, make, year, etc.

VISION REQUIREMENTS FOR A MONTANA LICENSE

Eyesight will be tested and drivers must meet a minimum standard of 20/40 vision in at least one eye, with or without corrective lenses. If glasses or contacts are worn during the vision screening, a lens restriction will be placed on the driver's license. If a lens restriction is placed on a driver's license, the driver must always wear glasses or contacts when operating a vehicle. The driver could be cited and lose driving privileges for a period of time for not wearing glasses or contacts.

E

Can you see this "E" from 20 feet away? Is there anyone in the class that can't?